

Name:SNEHA SATISH DALVI

C.No: UEC2022127

SY ENTC A

Batch A2

### EXPERIMENT 8

Title:Create a map of device ids and subscribers associated with it. Create a list of all device ids associated with a subscriber.

CODE:-

```
import java.util.ArrayList;
import java.util.HashMap;
import java.util.List;
import java.util.Map;
import java.util.Map.Entry;
class Subscriber{
private int subId;
private String name;
public Subscriber(int subId,String name){
this.subId=subId;
this.name=name;
}
public int getSubId(){
return subId;
}
public String getName(){
return name;
}
@Override
public String toString(){
return "Subscriber [subId="+subId+",name="+name+ "]";
}
}
public class MapDemo{
public static void main(String[] args){
Subscriber s1= new Subscriber(101,"Mr.P");
Subscriber s2= new Subscriber(201,"Mr.Q");
Subscriber s3= new Subscriber(301,"Mr.R");
Map<String,Subscriber> devices =new HashMap<>();
devices.put("d1",s1);
devices.put("d2",s1);
devices.put("d3",s1);
devices.put("d4",s1);
devices.put("e1",s2);
devices.put("e2",s2);
devices.put("e3",s2);
```

```
devices.put("f1",s3);
devices.put("f2",s3);
System.out.println(devices);
Map<Subscriber,List<String>> lsd=new HashMap<>();
for(Entry<String,Subscriber> entry : devices.entrySet()){
String deviceid=entry.getKey();
Subscriber s=entry.getValue();
if (lsd.containsKey(s)){
lsd.get(s).add(deviceid);
}
else{
List<String> devicelist=new ArrayList<>();
devicelist.add(deviceid);
lsd.put(s,devicelist);
}
}
System.out.println(lsd);
}
}
```